

METHOD FOR SELECTIVE PHOTOSENSITIZATION OF OPTICAL FIBERS

ABSTRACT

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A method for increasing the photosensitivity of a selected portion of an optical fiber and for producing a grating in the selected portion of an optical fiber. The method includes the step of placing the selected portion of the optical fiber in a hydrogen containing atmosphere. The volume of the hydrogen-containing atmosphere immediately surrounding only the selected portion of the optical fiber is heated to a temperature of at least 250°C. Only the selected portion of the optical fiber is exposed to the heated volume of the hydrogen-containing atmosphere at a temperature of at least 250°C for a predetermined time.